## **EUROPEAN PATENT OFFICE**

## Patent Abstracts of Japan

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APPLICANT: DAIKIN IND LTD;

INVENTOR :

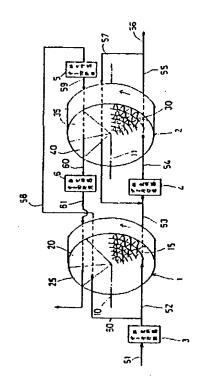
KOMURA MASAHARU:

INT.CL.

B01D 53/26 F26B 21/00

TITLE

DRY DEHUMIDIFIER



ABSTRACT:

PURPOSE: To obtain dry air with ultra-low humidity by enhancing dehumidification capacity, by combining two honeycomb rotors with a cooling heat exchanger and a heating heat exchanger.

CONSTITUTION: Gas to be treated is cooled by a first cooling heat exchanger 3 and passed through the passage 15 of the gas to be treated of a first honeycomb rotor 1 to perform the absorptive removal of humidity in the gas to be treated. The gas raised in temp. herein is cooled by a second cooling heat exchanger 4 and subsequently passed through the passage 30 of the gas to be treated of a second honeycomb rotor 2 to be further dehumidified. A part of this dehumidified gas is used as dry gas through a passage 56 and the remainder is passed through the purge gas passage 40 of the second honeycomb rotor 2 through a passage 57 and subsequently returned to the inlet side of the first honeycomb rotor 1. A part of the gas to be treated is passed through the purge gas passage of the first honeycomb rotor 1 through a passage 50 and subsequently heated by a first heating heat exchanger 5 to be utilized as the regeneration gas of the first honeycomb rotor 2. This gas is heated by a second heating heat exchanger 6 to regenerate the first honeycomb rotor 1.

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